LIMITED SUBSURFACE ASSESSMENT REPORT
HECLA MINING COMPANY
APEX SITE POND NO. 2
ST. GEORGE, UTAH

UTD 982590002

PREPARED FOR:
U.S. Department of the Interior
Bureau of Indian Affairs
Western Regional Office
Two Arizona Center
400 North 5th Street
Phoenix, Arizona 85004

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
6700 Paradise Road, Suite E
Las Vegas, Nevada 89119

December 6, 2006
Project No. 301646001

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Project No. 301646001

Mr. John Krause
U.S. Department of the Interior
Bureau of Indian Affairs
Western Regional Office
Two Arizona Center
400 North 5th Street
Phoenix, Arizona 85004

Subject: Limited Subsurface Assessment Report
Hecla Mining Company
Apex Site, Pond No. 2
St. George, Utah

Dear Mr. Krause:

In accordance with Purchase Order SMH00040268 Modification 0005, Ninyo & Moore has performed a limited subsurface assessment for the above-referenced site. The attached report presents our methodology, findings, and conclusions regarding the environmental conditions at the site. We appreciate the opportunity to be of service to you on this project.

Sincerely,
NINYO & MOORE

Gregory A. Beck, C.E.M.
Senior Environmental Scientist/Operations Manager

Albert P. Ridley, P.G.
Senior Geologist
Utah No. 5349178-2250
Expires: March 31, 2007

GB/APR/ltk

Distribution: (5) Addressee

LICENSED PROFESSIONAL GEOLOGIST
ALBERT PAUL RIDLEY
5349178-2250
EXP 3-31-07
STATE OF UTAH

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EXECUTIVE SUMMARY

Ninyo & Moore was retained by the Bureau of Indian Affairs to perform a limited subsurface assessment of the Hecla Mining Company Apex Site Pond No. 2 located on Highway 91 West, approximately 15 miles west of St. George, Utah. The purpose of the assessment was to evaluate the soil and, if encountered, the groundwater in the vicinity of Pond No. 2 for evidence of past releases from this pond. Field activities were performed during the week of October 6, 2006.

In summary, the following items were noted:

- Four soil borings were advanced to depths of between 31 and 33 feet below ground surface (bgs) in the vicinity of Hecla's Pond No. 2 using a hollow-stem auger drill rig. Borings were located in the vicinity of two previously reported seepage areas, on the west and east sides of the Pond containment; to the southwest (upgradient); and to the northeast (downgradient) of Pond No. 2.

- Soil samples were collected at 5-foot intervals during installation of the borings and analyzed for Resource Conservation and Recovery Act (RCRA) - 8 metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver) with the addition of cobalt, copper, gallium, germanium, iron, manganese, nickel, sodium, tungsten, zinc, and calcium. Selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline and diesel, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). A composite soil sample collected from drill cuttings was analyzed for RCRA-8 metals using the toxicity characteristic leaching procedure (TCLP) preparatory to disposal of the soil cuttings.

- Four groundwater monitoring wells were installed to depths ranging from 31 to 33 feet bgs in the four boreholes. Groundwater was not encountered during well installation or subsequently observed in the wells. Therefore, groundwater samples were not collected.

- No reported metal, TPH, VOC, or SVOC soil concentrations exceeded applicable site reclamation criteria or United States Environmental Protection Agency (EPA) Region 9 maximum contaminant levels (MCLs) for direct soil contact at industrial sites.

- Based on the soil analytical results and the lack of water in the monitoring wells, no indication of a release of leachate from Pond No. 2 was noted during this limited assessment. However, this should not be construed as a conclusion that no release has occurred because the scope of this assessment was limited by the number of wells installed and Hecla's refusal to allow drilling inside the fenced Pond No. 2 compound, which prevented Ninyo & Moore from optimally placing the monitoring wells near historical seepage areas of Pond No. 2 to detect evidence of leakage.

- In order to continue monitoring for evidence of past releases of leachate or evidence of potential future releases of leachate from Pond No. 2, Ninyo & Moore recommends that the four shallow monitoring wells be inspected quarterly for the presence of water. In the event that water is present, we recommend water samples be collected and analyzed for metals including RCRA-8 metals, cobalt, copper, gallium, germanium, iron, manganese, mercury, nickel, sodium, tungsten, zinc and calcium, VOCs, SVOCs, TPH as gasoline and diesel, and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

- Ninyo & Moore recommends installation of a deep well to a depth of between approximately 200 and 300 feet bgs downgradient from Pond No. 2 to monitor water quality in the deep aquifer. In order to minimize the possibility of shallow groundwater migration into the deeper aquifer, prior to installation of the deep well a steel outer casing with a cement collar should be installed from the ground surface to a depth of approximately 35 feet below the ground surface, approximately 5 feet into the siltstone and sandstone bedrock.

1. INTRODUCTION

Ninyo & Moore was retained by the Bureau of Indian Affairs (BIA) to perform a limited subsurface assessment of the Hecla Mining Company (Hecla) Apex Site Pond No. 2 located on Highway 91 West, approximately 15 miles west of St. George, Utah. The purpose of the assessment was to evaluate the soil and, if encountered, the groundwater in the vicinity of Pond No. 2 for evidence of past releases from this pond.

2. SITE BACKGROUND

The following summary of site background information is based on review of site documents, including the Phase I ESA report, prepared by Ninyo & Moore and dated March 17, 2005, governmental agency files, and discussions with persons familiar with the site.

2.1. Site Location and Description

The former OMG Apex site (Apex facility) is located approximately 15 miles west of St. George, Washington County, Utah and approximately 0.5 miles south of State Highway 91 on the eastern slope of the Beaver Dam Mountains. The United States Geological Survey (USGS) Shivwits, Utah Quadrangle, 7.5-minute series topographic map, provisional edition 1983, identifies the site as being located in Section 5, Township 42 South, Range 17 West at an elevation of approximately 3,700 feet above mean sea level with drainage of the site toward the northeast and the Santa Clara River, located approximately 2 miles to the northeast. The site location is presented on Figure 1.

The subject property encompasses approximately 180 acres of leased trust land of the Shivwits Band of Paiute Indians (the Band). Of the total lease acreage, approximately 30 acres was used for plant operations, approximately 70 acres was used for general storage and waste disposal, and the remaining approximately 80 acres was under lease but not used except for construction of two small parking lots located west of the facility.

In accordance with an Amendment to Lease entered into by Hecla and the Band on September 25, 1995, Hecla leases and is responsible for a waste facility, designated Hecla Pond No. 2, located on approximately 8.28 acres of the original site lease. The waste facility consists of a synthetically lined tailings impoundment that is approximately 500 feet in diameter and approximately 30 feet deep into which mineral beneficiation waste and certain waste from a cobalt sulfate recovery operation was deposited from approximately 1984 to 1995. The Hecla Pond No. 2 is located on the eastern margin of the leased property. A site map is presented on Figure 2.

2.1.1. Site Geology

The site lies near the boundary of the Basin and Range and the Colorado Plateau physiographic provinces. Geologic structures in the area were formed primarily during the Late Cretaceous and Paleocene time approximately 60 million years ago. Approximately 20 million years ago, faulting and warping began which resulted in the features observed today. Two north-trending faults, the western Reef Reservoir Fault, and the eastern Wittwer Fault, have been mapped approximately 0.5 miles apart on the site (JBR, 2001).

The site is underlain by a complex sequence of light gray, dense to very dense shaley, gypsiferous mud/siltstone units of the Shnabkaib member of the middle Moenkopi Formation bedrock of Triassic Age (JBR, 2001). These sedimentary rocks are inter-bedded with gypsum and reportedly form a layer up to 800 feet thick in the vicinity of the site (JBR, 2001). The bedrock is overlain by unconsolidated Quaternary alluvial deposits derived from the Moenkopi Formation and are generally relatively rich in carbonate and sulfate salts (Kleinfelder, 1995). These deposits consist of inter-bedded gravel, sand, silt, and clay units several inches to several feet thick and ranging in size from pebbles to boulders. Alluvial fan deposits, consisting of gravely, sandy silts and clayey silts, are located at the base of drainages. Alluvial stream sediment deposits generally containing less gravel than the alluvial fans are found in moderately steep drainages.

Windblown sand and loam are found in surface deposits, particularly in low-lying areas. The soils in the area are characterized as a gravely sandy loam underlain in areas by cemented hard caliche to depths of between 8 and 20 inches. This caliche restricts downward movement of water and plant roots. The soils have a high calcium carbonate content.

2.1.2. Site Hydrogeology

Regional aquifers located along the eastern flank of the Beaver Dam Mountains are generally associated with fracture systems in underlying limestone and sandstone. The general direction of groundwater flow in the area is northeasterly, toward the Santa Clara River. During installation of four exploratory boreholes that were subsequently used as monitoring and/or supply wells, groundwater was found in a fractured limestone aquifer at depths of between 160 and 360 feet below the surface (SRK, 1984). The aquifer is believed to be confined since it demonstrates artesian conditions with an increase in head of more than 30 feet. Confining beds for this aquifer are mainly a hard dense limestone with inter-bedded, fine-grained sandstone. The aquifer is hydraulically isolated from below by the presence of a very hard, unfractured limestone.

2.2. Previous Work

The Apex facility was originally constructed in 1984 by St. George Mining Company (SGMC) as a processing mill for gallium and germanium ore from the Apex mine located in the Beaver Dam Mountains. In March 1989, Hecla Mining Company purchased the facility and upgraded it to process germanium ore until closure of the mine and processing facility in 1990. During this period, Hecla disposed of mill tailings in Pond No. 2. Hecla shut down the gallium and germanium operation in 1990 and converted the facility to a cobalt recycling operation utilizing products from non-hazardous recyclable materials in 1991. Certain wastes from the cobalt recycling operation were also disposed of in Pond No. 2.

In 1995, Hecla sold the operation to OMG, Inc. (OMG) which continued to operate the cobalt production facility and added a tungsten recycling plant in 1998. OMG operated the

facility using non-hazardous cobalt and tungsten-containing by-products from many industries. OMG terminated operations at the facility at the end of 2002.

2.2.1. Transfer of Waste to Pond No. 2

Hecla sampled solid wastes in SGMC ponds in 1988 prior to purchase of the facility. Those analyses showed that solid waste samples from Ponds 1C, 2A, and 3A exceeded the regulatory limit for arsenic, using the EP toxicity test, and solid waste samples from Pond 1C also exceeded the regulatory limit for cadmium, using the EP toxicity test. As part of the Purchase and Sale agreement between Hecla and OMG in 1995, Hecla removed materials exceeding 80 parts per million for arsenic, lead, and total petroleum hydrocarbons (TPH) from inside and beneath various ponds in accordance with soil cleanup standards established by the state of Utah. These materials were disposed of in Pond No. 2. During the course of this operation the perimeter embankment of Pond No. 2 was raised approximately 5 feet with unlined soil to provide sufficient freeboard for material disposal.

Wastes moved into Pond No. 2 included approximately; 30,000 cubic yards of waste trucked from Pond 1A/1B; 10,000 cubic yards dredged and pumped as a slurry from Pond 3A; 340 cubic yards trucked from Pond 1C; 23,272 cubic yards trucked from Pond 2A; 1,200 cubic yards dredged and pumped as a slurry from former St. George Mining Company (SGMC) Pond 3A; and 180 cubic yards from the Surge Pond. Pond liner materials and subsoils were excavated and trucked to Pond No. 2. In addition, an unspecified amount of unmilled ore from the Apex Mine, containing between 0.44 and 1.53 percent arsenic, was placed in Pond No. 2 when operations were shut down.

2.2.2. EPA Monitoring, Testing, and Analysis Consent Order

The United States Environmental Protection Agency (EPA) issued an Order, dated September 22, 1999, to Hecla Mining Company requiring monitoring, testing, and analysis of Pond No. 2. This Order required that HECLA prepare a soil sampling and analysis work plan and a leachate and runoff sampling and analysis work plan. The EPA Order

included a report that EPA inspectors observed uncontrolled seepage on the northeast side of the waste pile (Pond No. 2).

2.2.3. Hecla Work Plans

The two work plans mandated in the EPA Order were prepared in January 2000. The Leachate and Runoff Sampling and Analysis Work Plan (Shepherd Miller, 2000a) notes that, at that time, seepage was occurring on the southwest side of Pond No. 2 with an additional area of "potential seepage" consisting of a moist area with no observed flow, located on the east side of Pond No. 2. The BIA, Western Regional Office reviewed the draft Work Plans and submitted comments to EPA Region 8 in a letter dated March 17, 2000 (BIA, 2000). The BIA letter notes that the proposed plan "does not include any rationale or sampling to determine whether the liner is leaking and a migration pathway exists below the liner. Deep wells and associated soils and groundwater sampling are recommended adjacent to Pond 2."

In a letter to the Shivwits Band of Paiute Indians, dated June 13, 2001 (EPA, 2001a), EPA stated that since hazardous materials are acknowledged to exist in Hecla Pond No. 2 no further characterization of those wastes was necessary or appropriate. Hecla was released from the requirement for further soil and leachate sampling and was directed to submit a revised Work Plan to install two groundwater wells, inside Pond No. 2 and in the seepage area northeast of Pond No. 2, to determine the extent of soil saturation resulting from seepage from Pond No. 2 "into the subsurface bedrock and possibly the lower-lying aquifer." The revised Soils Sampling and Analysis Work Plan (Shepherd Miller, 2001a) was submitted on August 30, 2001, and approved by EPA on September 21, 2001.

2.2.4. Pond No. 2 Seepage

Seepage migrating through the perimeter embankment on the southwest side of Pond No. 2 was first observed by Hecla in 1997. An additional moist area was observed on the east side of Pond No. 2 in 1997. In order to intercept the leaking water, Hecla

constructed a synthetically lined ditch flowing to a synthetically lined evaporation pond on the southwest side of Pond No. 2. A second evaporation pond was constructed in 1998 to increase the holding and evaporation capacity of the seepage water from the southeast corner of Pond No. 2. Between January 2000 and March 2001 various improvements to the evaporation pond system were made including constructing a third pond, excavating and backfilling the second pond, and re-lining the evaporation system.

In December 2000, water from the collection and evaporation system associated with Pond No. 2 was analyzed for the presence of various metals. Laboratory results indicated that the water from the evaporation system had concentrations of arsenic, cadmium, cobalt, copper, lead, nickel, and silver that significantly exceeded Resource Conservation and Recovery Act (RCRA) toxicity characteristics concentrations (EPA, 2001c).

2.2.5. Pond No. 2 Soils Sampling and Analysis

In accordance with the approved Soil Sampling and Analysis Work Plan (Shepherd Miller, 2001a) in October 2001, six boreholes were installed inside the Pond No. 2 containment to depths of between approximately 6 and 10 feet below ground surface (bgs), one borehole was installed southwest of Pond No. 2 to a depth of approximately 25 feet bgs, and one borehole was installed northwest of Pond No. 2 to a depth of approximately 28 feet bgs. Soil samples collected during borehole installation were analyzed for select physical parameters such as density, moisture content, and specific gravity. No chemical analyses of soil samples were conducted and no groundwater was encountered. No evidence of seepage migration into the soil was noted (Hecla, 2001).

2.2.6. Closure Plan

On May 28, 2004, EPA requested comment on the Pond No. 2 Closure Work Plan from the Band (EPA, 2001b). In response, BIA expressed concern for the lack of proposed analytical sampling and monitoring of subsurface soils and groundwater in the vicinity of Pond No. 2. In addition, BIA suggested that a groundwater monitoring and facility

maintenance program be established for a least a 30-year period consistent with solid waste landfill closures (BIA, 2004).

On July 7, 2004, EPA approved the Final Closure Work Plan for Pond No. 2 (EPA, 2004c). In a response letter to BIA, dated July 15, 2006, EPA stated that sufficient soil and groundwater analyses had been performed in the vicinity of Pond No. 2 and that further soil sampling or groundwater monitoring at the site was not "necessary or prudent" (EPA, 2004b). EPA further asserted that Pond No. 2 is not a hazardous waste landfill under Code of Federal Regulations (C.F.R.) 40 part 265 and, therefore establishment of a 30-year monitoring plan and facility maintenance program under 40 C.F.R. Part 258 was not appropriate.

2.2.7. EPA and Hecla Administrative Order on Consent

On September 9, 2004, EPA filed an Administrative Order on Consent pursuant to section 7003 of RCRA, 42 U.S.C. § 6973 for closure of Pond No. 2.

2.2.8. Pond No. 2 Closure

In accordance with the approved Final Closure Work Plan (Monster, 2004), Hecla commenced closure activities at Pond No. 2 in July 2004. Closure activities consisted of:

- Dewatering of the upper layers of the impoundment initially using vertical wicks and later a system of sumps and pumps
- Construction of evaporation ponds on top of the containment for disposal of removed water
- Impoundment re-grading and embankment re-sloping and compaction
- Installation of a geosynthetic clay liner (GCL) tied to the existing impoundment liner
- Removal of evaporation ponds and final surface re-grading
- Installation of a GCL barrier layer on top of the re-graded surface
- Installation of a protective layer of sandy lean clay over the barrier layer

- Installation of an erosion-resistant surface layer of 3-inch well graded rock and placement of settlement monuments

Closure activities were substantially completed in December 2005. The post construction inspection of Pond No. 2 was conducted by EPA on May 23, 2006, and reported in the RCRA Compliance Evaluation Inspection Report, prepared by EPA and dated May 23, 2006 (EPA, 2006a). The report noted a discolored area of soil on the northeastern side of Pond No. 2 which was sampled by a Hecla representative as was a second small area of discoloration located on the southwest side of the Pond No. 2 impoundment.

Laboratory analysis of the sample from the southwest side of Pond No. 2 indicated a TPH as motor oil concentration of 70,500 milligrams per kilogram (mg/kg). Hecla postulated that this contamination resulted from leakage of heavy equipment parked in the area during closure activities (Hecla, 2006). No remedial action was proposed by Hecla.

3. SCOPE OF WORK

The following sections describe the methods used in this assessment, including descriptions of the sampling media and locations, field sampling methods, and analytical methods and protocol.

3.1. Soil Boring Installation

A hollow-stem auger drill rig was used to install four soil borings, designated SW-1 through SW-4. The borings were installed to depths of between approximately 31 and 33 feet bgs and approximately 2 feet below the top of the siltstone and sandstone bedrock of the Moenkopi Formation. Boring SW-1 was located in the vicinity of a previously reported seepage area on the southwest side of the containment, boring SW-2 was located upgradient of Pond No. 2 to the southwest, boring SW-3 was located in the vicinity of a previously reported seepage area on the east side of the containment, and boring SW-4 was located downgradient of Pond No. 2, to the northeast.

Final boring locations for borings SW-1, SW-3, and SW-4 were further from the Pond No. 2 containment than originally proposed due to Hecla's refusal to allow Ninyo & Moore access

to the area inside the containment fencing. A geologist observed the drilling and prepared a field log of the materials encountered and the depths of the samples collected in each boring. Boring locations are presented on Figure 3.

3.2. Monitoring Well Installation

Each of the four soil borings was converted to a groundwater monitoring well constructed using 10 feet of 2-inch diameter flush-jointed Schedule 40 PVC well screen with 0.020-inch factory cut slots from the bottom of the borehole across the interface between the top of the bedrock and the overlying soil materials, and 2-inch diameter flush jointed Schedule 40 PVC blank pipe installed to several feet above the ground surface. A threaded end plug was placed at the bottom of the well, and a locking PVC cap was placed at the top of the casing. The annular space was filled with clean sorted sand to a level approximately 2 feet above the top of the screen. A 2-foot bentonite seal was placed at the top of the sand pack, and the remaining annulus was sealed with grout to the surface. The top of the casing was finished with a water-tight, aboveground well cover with a locking cap to discourage unauthorized access. A well construction schematic is presented on Figure 4. Boring logs with well construction data are included in Appendix A.

The drilling augers and soil sampling equipment were decontaminated prior to use at each location. Drill cuttings were stored on site in 55-gallon drums pending receipt of analytical results. The stored soil was disposed of in accordance with applicable local, state, and federal requirements.

3.3. Soil Sampling

Soil samples were retrieved at approximately 5-foot intervals during boring installation using a stainless steel split-spoon sampler and evaluated for field characteristics, including the presence or absence of staining and odor and field-screened using a photoionization detector (PID). Soil from the split-spoon sampler was placed into a zip-lock plastic bag so that the bag was approximately half-full. The zip-lock bag was then sealed and the temperature allowed to equilibrate for several minutes. Instrument readings were taken by

opening the zip-lock bag just enough to allow insertion of the PID probe and then recording the reading in the appropriate column on the boring log at the appropriate depth.

The soil samples collected for laboratory analysis were placed in laboratory-supplied, glass jars and labeled according to the sample location, date, analysis requested, and the name of the person collecting the sample. The sample jars were stored in an insulated ice chest, preserved on ice, and delivered under chain-of-custody protocol to a Utah-certified laboratory for analysis. Soil samples were analyzed for RCRA - 8 metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver) with the addition of cobalt, copper, gallium, germanium, iron, manganese, nickel, sodium, tungsten, zinc, and calcium using EPA Methods 6010B and 7471A. Selected soil samples were analyzed for TPH as gasoline and diesel using EPA Method 8015B, volatile organic compounds (VOCs) using EPA Method 8260B, and semi-volatile organic compounds (SVOCs) using EPA Method 8270C. A composite soil sample collected from drill cuttings was analyzed for RCRA-8 metals using the toxicity characteristic leaching procedure (TCLP) and EPA Method 6010B preparatory to disposal of the soil cuttings.

3.4. Groundwater Sampling

Groundwater was not encountered during well installation or subsequently observed in the wells. Therefore, groundwater samples were not collected.

4. ANALYTICAL RESULTS

Soil metal analytical results are summarized in Table 1. TPH, SVOC, and VOC constituent concentrations reported above applicable laboratory action levels are summarized in Table 2. Copies of the laboratory analytical reports and chain-of-custody forms are included in Appendix B. No reported metal, TPH, VOC, or SVOC concentrations exceeded applicable site reclamation criteria or EPA Region 9 maximum contaminant levels (MCLs) for direct soil contact at industrial sites.

5. CONCLUSIONS

- Groundwater was not encountered during boring installation or subsequently noted in any of the monitoring wells.

- Based on the soil analytical results and the lack of water in the monitoring wells, no indication of a release of leachate from Pond No. 2 was noted during this limited assessment. However, this should not be construed as a conclusion that no release has occurred because the scope of this assessment was limited by the number of wells installed and Hecla's refusal to allow drilling inside the fenced Pond No. 2 compound, which prevented Ninyo & Moore from optimally placing the monitoring wells near historical seepage areas of Pond No. 2 to detect evidence of leakage.

- In order to continue monitoring for evidence of past releases of leachate or evidence of potential future releases of leachate from Pond No. 2, Ninyo & Moore recommends that the four shallow monitoring wells be inspected quarterly for the presence of water. In the event that water is present, we recommend water samples be collected and analyzed for metals including RCRA-8 metals, cobalt, copper, gallium, germanium, iron, manganese, mercury, nickel, sodium, tungsten, zinc and calcium; VOCs; SVOCs; TPH as gasoline and diesel; and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

- Ninyo & Moore recommends installation of a deep well to a depth of between approximately 200 and 300 feet bgs downgradient from Pond No. 2 to monitor water quality in the deep aquifer. In order to minimize the possibility of shallow groundwater migration into the deeper aquifer, prior to installation of the deep well a steel outer casing with a cement collar should be installed from the ground surface to a depth of approximately 35 feet below the ground surface, approximately 5 feet into the siltstone and sandstone bedrock.

6. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further

assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory, which is certified by the State of Utah to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader required any additional information, or has questions regarding content, interpretations presented, or completeness of this document. This report is intended exclusively for use by the client. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than the client is undertaken at said parties' sole risk.

7. CERTIFICATION

In accordance with Purchase Order SMH00040268 Modification 0005:

I hereby certify that all laboratory analytical data was generated by an EPA-approved, National Environmental Laboratory Accreditation Program compliant laboratory for each constituent and media presented herein.

Albert P. Ridley, P.G.
State of Utah Professional Geologist
No.: 5349178-2250
Expires: March 31, 2007

1-18-07
Date

8. SELECTED REFERENCES

Brown and Caldwell, 2004, Final Reclamation Plan, OMG Americas, Inc., Apex Site, dated January 30.

Bureau of Indian Affairs, 2004, Concerns Regarding the Hecla Mining Company Apex Site Pond 2 Closure Work Plan, letter dated June 10.

Bureau of Indian Affairs, 2000, Comments Regarding Characterization of Hecla Mining Company's Pond 2, letter dated March 17.

Hecla Mining Company, 2006, Follow-up of May 23, 2006 EPA/Hecla Site Inspection, dated June 16.

Hecla Mining Company, 2001, Results of October 2001 Investigations; Apex Site Pond 2 Soils Sampling and Analysis, dated December 3.

JBR Environmental Consultants, Inc., 2001, Leak Detection, Piezometer Installation and Soil Sampling, date unknown.

Kleinfelder, Inc., 1995, Surface Soil Assessment Hecla Mining Company-Apex Unit, St. George, Utah, dated July 7.

Monster Engineering Incorporated, 2004, Apex Site Final Engineering Report for Pond 2 Closure, prepared for Hecla Mining Company, dated March 25.

Shepherd Miller, 2001a, Soil Sampling and Analysis Work Plan, Hecla Apex Unit, dated August 30.

Shepherd Miller, 2001b, Soil Sampling and Analysis Work Plan, Hecla Apex Unit, dated June 22.

Shepherd Miller, 2000a, Leachate and Runoff Sampling and Analysis Work Plan, Hecla Apex Unit, dated January 20.

Shepherd Miller, 2000b, Soil Sampling and Analysis Work Plan, Hecla Apex Unit, dated January 20.

Steffen Robertson & Kirsten (SRK), 1984, Groundwater Supply Availability for the Apex Project, Washington County, Utah, dated May.

United States Environmental Protection Agency, 2006a, RCRA Compliance Evaluation Inspection Report, Hecla Mining Company, UTD982590002, dated May 23.

United States Environmental Protection Agency, 2006b, Request for Soil and Groundwater Assessment Assistance, Hecla Mining Company Apex Site, Pond 2, St. George, Utah, letter dated March 20.

United States Environmental Protection Agency, 2004a, Administrative Order On Consent, Hecla Mining Company, dated September.

United States Environmental Protection Agency, 2004b, Response to BIA Letter Concerning Hecla Mining Company's Final Closure Work Plan for Apex Site Pond 2, St. George, Utah, letter dated July 15.

United States Environmental Protection Agency, 2004c, Hecla Mining Co., Docket No. RCRA-8-99-06, Final Closure Work Plan Approval, letter dated July 7.

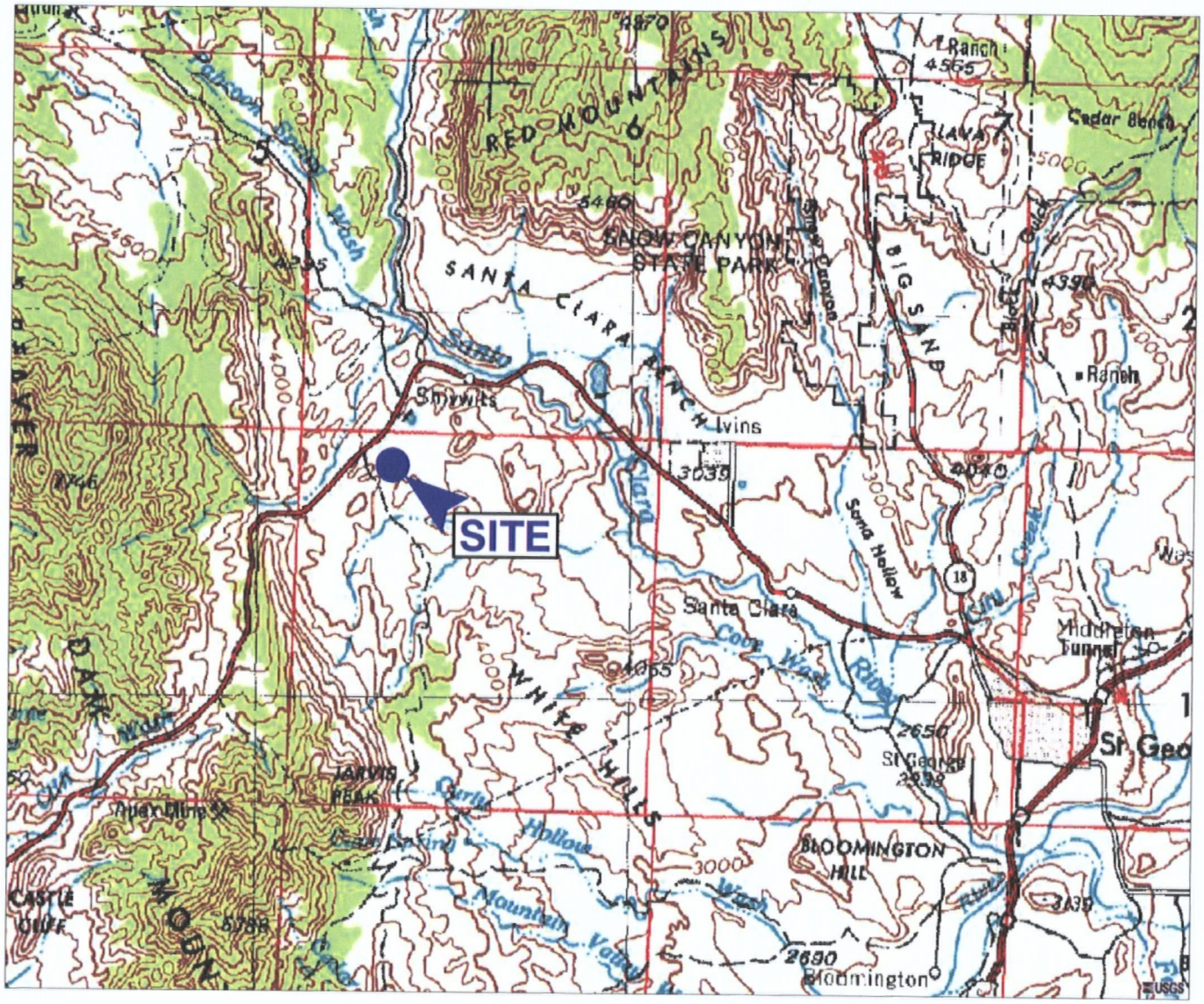
United States Environmental Protection Agency, 2001a, Revised Scope of Work Plans Submitted Per EPA's Order Requiring Monitoring, Testing, Analysis and Reporting for the Hecla Pond, letter dated June 13.

United States Environmental Protection Agency, 2001b, Request for Concurrence/Comment on Hecla Mining Company Apex Site Pond 2 Closure Plan, letter dated May 28.

United States Environmental Protection Agency, 2001c, December 2000 Sample Results, letter dated May 7.

United States Environmental Protection Agency, 1999, Order Requiring Monitoring, Testing, Analysis and Reporting issued pursuant to Section 3013 of RCRA, 42 U.S.C. §6934, for the Hecla Pond, Shivwits Band Paiute Reservation, Washington County, Utah, dated September 22.

FIGURES



SCALE IN FEET

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REFERENCE: 2004 TERRASERVER USA WEBSITE
NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION MAP	FIGURE
PROJECT NO. 301646001 / DATE 12/06	APEX SITE ST. GEORGE, UTAH	1

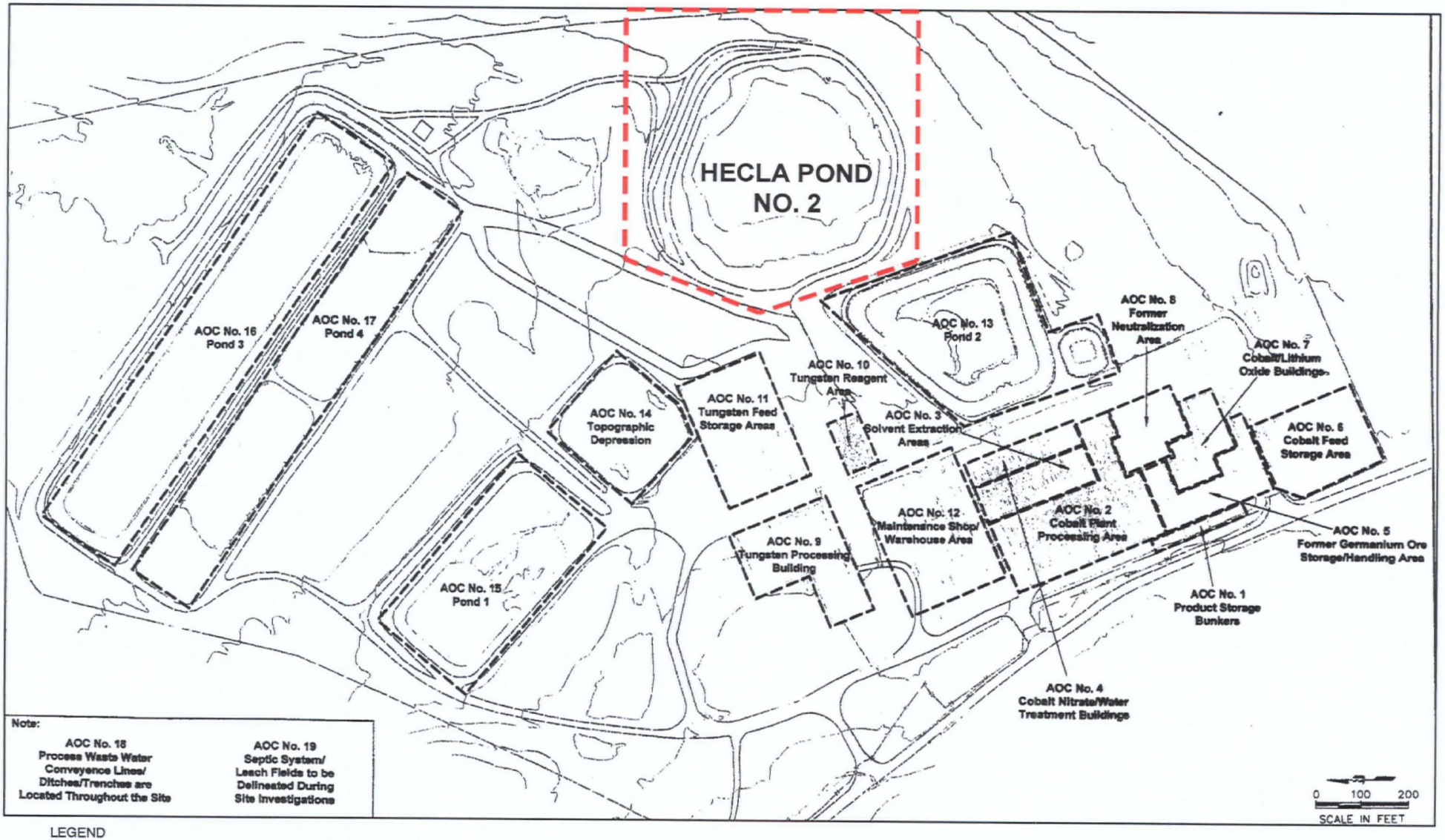
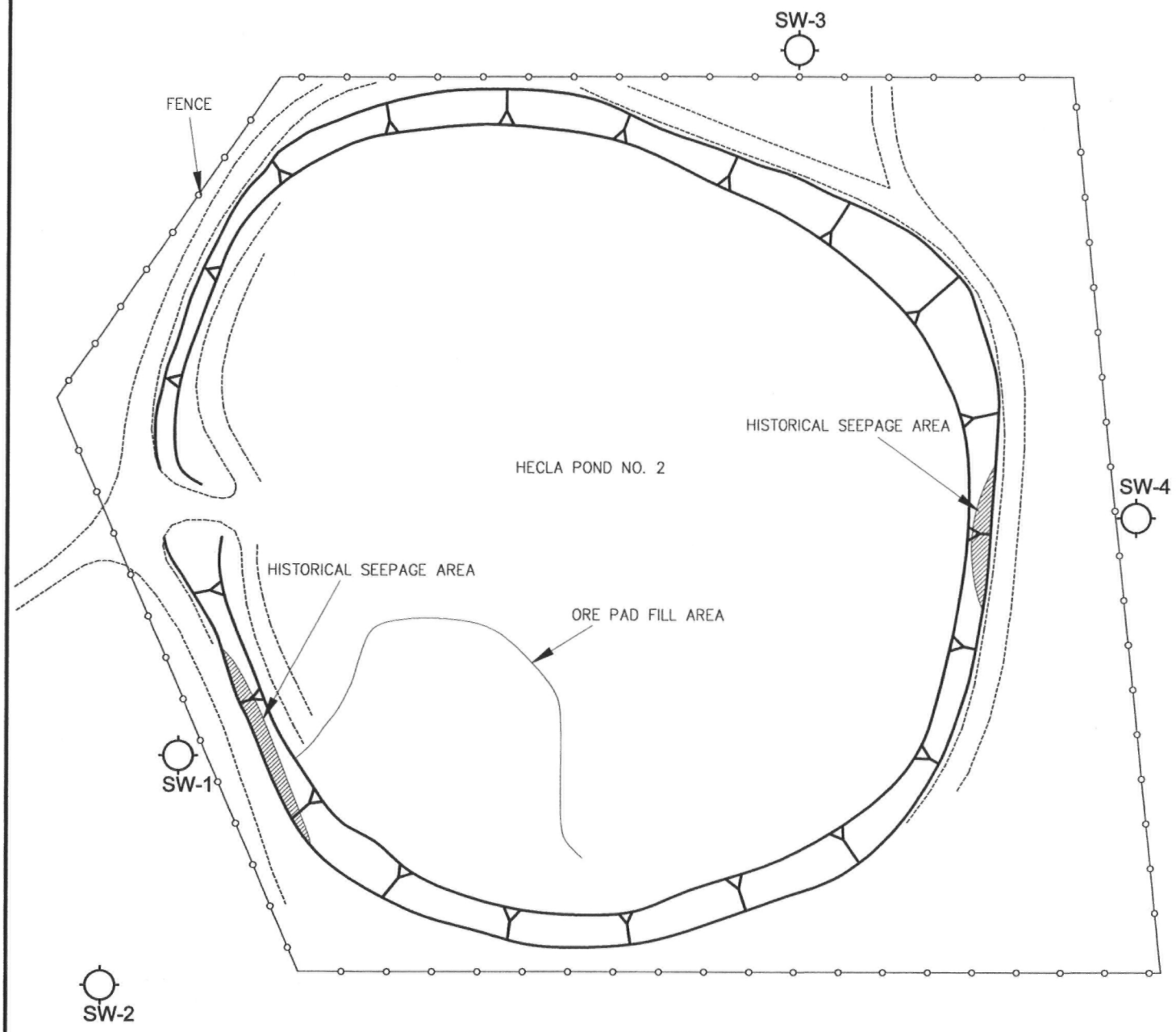


FIGURE FROM BROWN AND CALDWELL (2004)

Ninyo & Moore	SITE MAP	FIGURE
PROJECT NO. 301646001 / DATE 12/06	APEX SITE ST. GEORGE, UTAH	2



LEGEND

SW Shallow Monitoring Well (approximate location)

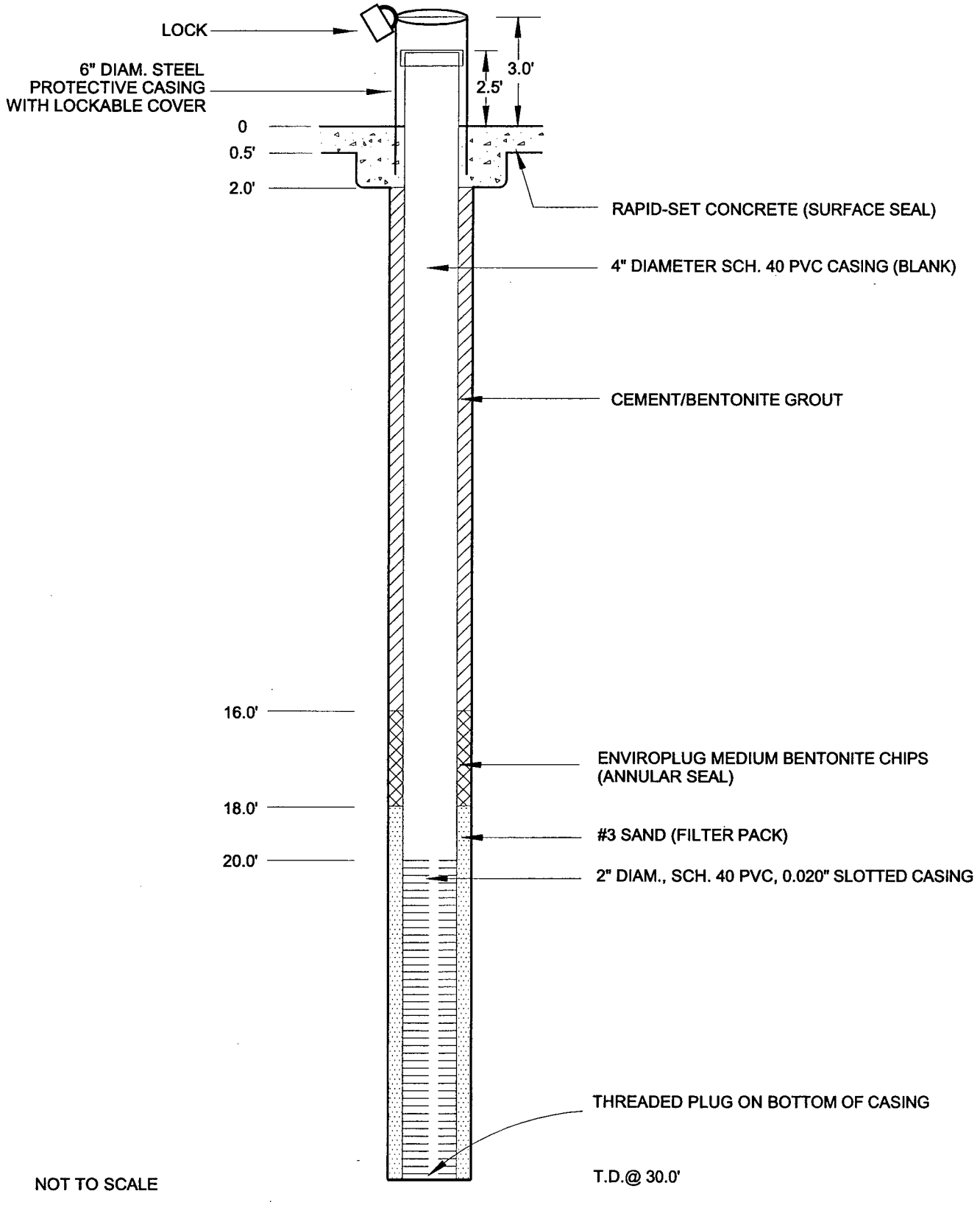
N

0 100 200

APPROXIMATE SCALE IN FEET

REFERENCE: Hecla Mining Company Memorandum 12/3/01.
NOTE: Dimensions, directions, and locations are approximate.

Ninyo & Moore	MONITORING WELL LOCATION MAP	FIGURE
PROJECT NO. 301646001 / DATE 12/06	APEX SITE ST. GEORGE, UTAH	3



Ninyo & Moore	SCHEMATIC SHALLOW WELL CONSTRUCTION SUMMARY	FIGURE
PROJECT NO. 301646001 / DATE 12/06	APEX SITE ST. GEORGE, UTAH	4

TABLES

Table 1. Soil Metal Analytical Results
HECLA Pond 2

Parameter	Method	Units	Reclamation Criteria	Sample Location and Depth					
				SW-1 (5')	SW-1 (10')	SW-1 (15')	SW-1 (20')	SW-1 (25')	SW-1 (30')
Arsenic	EPA 6010B	mg/kg	260	<10	<10	<10	<10	21.9	<10
Barium	EPA 6010B	mg/kg	72,000	63.0	64.5	28.6	14.4	48.7	358
Cadmium	EPA 6010B	mg/kg	510	<2	<2	<2	<2	10.7	<2
Calcium	EPA 6010B	mg/kg	NA	145,000	113,000	68,300	148,000	131,000	113,000
Chromium	EPA 6010B	mg/kg	3,100	<5	7.9	9.9	<5	<5	<5
Cobalt	EPA 6010B	mg/kg	20,000	<5	7.1	9.4	<5	7.1	5.4
Copper	EPA 6010B	mg/kg	41,000	8.8	7.4	17.4	13.8	24.4	17.4
Gallium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Germanium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Iron	EPA 6010B	mg/kg	31,000	3,230	12,960	15,700	6,150	12,000	9,920
Lead	EPA 6010B	mg/kg	750	5.6	<5	<5	9.3	27.5	38.7
Manganese	EPA 6010B	mg/kg	19,000	108	185	314	263	392	315
Mercury	EPA 7471A	mg/kg	310	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Nickel	EPA 6010B	mg/kg	20,000	14.1	52.0	41.3	26.6	34.0	35.4
Selenium	EPA 6010B	mg/kg	5,100	<10	10.9	<10	<10	<10	<10
Silver	EPA 7761	mg/kg	5,100	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]
Sodium	EPA 6010B	mg/kg	NA	181[2]	251[2]	358[2]	359[2]	539[2]	576[2]
Tungsten	EPA 6010B	mg/kg	NA	<10	<10	<10	<10	<10	<10
Zinc	EPA 6010B	mg/kg	100,000	24.6	23.6	33.9	9.2	620	31.8

Concentrations expressed as milligrams per kilogram (mg/kg)

NA - Not applicable

[1] Analyte not detected. Spike or surrogate recovery below limits.

[2] Estimated value. Result may be biased low. Spike or surrogate recovery below limits.

Table 1. Soil Metal Analytical Results
HECLA Pond 2

Parameter	Method	Units	Reclamation Criteria	Sample Location and Depth					
				SW-2 (5')	SW-2 (10')	SW-2 (15')	SW-2 (20')	SW-2 (30')	SW-3 (5')
Arsenic	EPA 6010B	mg/kg	260	<10	<10	<10	<10	<10	<10
Barium	EPA 6010B	mg/kg	72,000	60.0	84.0	98.9	68.7	24.1	83.3
Cadmium	EPA 6010B	mg/kg	510	<2	<2	<2	<2	<2	<2
Calcium	EPA 6010B	mg/kg	NA	110,000	95,900	60,500	96,200	169,000	110,000
Chromium	EPA 6010B	mg/kg	3,100	<5	5.6	9.6	<5	<5	<5
Cobalt	EPA 6010B	mg/kg	20,000	<5	6.0	9.6	8.4	<5	12.4
Copper	EPA 6010B	mg/kg	41,000	<5	8.8	19.5	17.4	16.9	30.8
Gallium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Germanium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Iron	EPA 6010B	mg/kg	31,000	4,980	8,590	11,600	11,800	5,770	8,170
Lead	EPA 6010B	mg/kg	750	<5	<5	<5	<5	<5	32.6
Manganese	EPA 6010B	mg/kg	19,000	136	255	323	444	277	249
Mercury	EPA 7471A	mg/kg	310	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Nickel	EPA 6010B	mg/kg	20,000	17.9	36.0	40.9	45.1	22.2	38.6
Selenium	EPA 6010B	mg/kg	5,100	<10	<10	12.9	<10	<10	<10
Silver	EPA 7761	mg/kg	5,100	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]	<1[1,2]
Sodium	EPA 6010B	mg/kg	NA	597[2]	1,250[2]	2,340[2]	1,050[2]	363[2]	290[2]
Tungsten	EPA 6010B	mg/kg	NA	<10	<10	<10	<10	<10	24.6
Zinc	EPA 6010B	mg/kg	100,000	8.1	19.7	48.7	38.2	29.8	39.0

Concentrations expressed as milligrams per kilogram (mg/kg)

NA - Not applicable

[1] Analyte not detected. Spike or surrogate recovery below limits.

[2] Estimated value. Result may be biased low. Spike or surrogate recovery below limits.

Table 1. Soil Metal Analytical Results
HECLA Pond 2

Parameter	Method	Units	Reclamation Criteria	Sample Location and Depth					
				SW-3 (10')	SW-3 (15')	SW-3 (20')	SW-3 (25')	SW-3 (30')	SW-4 (5')
Arsenic	EPA 6010B	mg/kg	260	<10	<10	<10	<10[1]	<10[1]	<10[1]
Barium	EPA 6010B	mg/kg	72,000	38.9	47.7	46.6	38.8	46.9	115
Cadmium	EPA 6010B	mg/kg	510	<2	<2	<2	<2	<2	<2
Calcium	EPA 6010B	mg/kg	NA	177,000	157,000	139,000	166,000	133,000	160,000
Chromium	EPA 6010B	mg/kg	3,100	<5	<5	<5	<5	10.4	<5
Cobalt	EPA 6010B	mg/kg	20,000	6.9	<5	5.5	<5	9.4	6.0
Copper	EPA 6010B	mg/kg	41,000	8.9	14.3	15.4	9.9	45.0	9.6
Gallium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Germanium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20	<20
Iron	EPA 6010B	mg/kg	31,000	4,820	6,400	5,600	7,680	17,100	10,000
Lead	EPA 6010B	mg/kg	750	<5	7.3	7.2	<5	<5	5.7
Manganese	EPA 6010B	mg/kg	19,000	148	232	179	361	286	254
Mercury	EPA 7471A	mg/kg	310	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Nickel	EPA 6010B	mg/kg	20,000	26.3	29.8	36.5	17.4	29.6	23.8
Selenium	EPA 6010B	mg/kg	5,100	<10	<10	<10	<10	<10	<10
Silver	EPA 7761	mg/kg	5,100	<1[1,2]	<1[1,2]	<1[1,2]	<1	<1	<1
Sodium	EPA 6010B	mg/kg	NA	293[2]	767[2]	539[2]	482[2]	912[2]	231[2]
Tungsten	EPA 6010B	mg/kg	NA	10.7	<10	<10	<10	<10	<10
Zinc	EPA 6010B	mg/kg	100,000	12.7	12.3	16.7	24.2	37.9	27.1

Concentrations expressed as milligrams per kilogram (mg/kg)

NA - Not applicable

[1] Analyte not detected. Spike or surrogate recovery below limits.

[2] Estimated value. Result may be biased low. Spike or surrogate recovery below limits.

Table 1. Soil Metal Analytical Results
HECLA Pond 2

Parameter	Method	Units	Reclamation Criteria	Sample Location and Depth				
				SW-4 (10')	SW-4 (15')	SW-4 (20')	SW-4 (25')	SW-4 (30')
Arsenic	EPA 6010B	mg/kg	260	<10[1]	<10[1]	<10[1]	<10[1]	<10[1]
Barium	EPA 6010B	mg/kg	72,000	119	83.3	62.4	467	62.9
Cadmium	EPA 6010B	mg/kg	510	<2	<2	<2	<2	<2
Calcium	EPA 6010B	mg/kg	NA	60,600	113,000	132,000	112,000	135,000
Chromium	EPA 6010B	mg/kg	3,100	23.1	11.9	6.9	10.4	<5
Cobalt	EPA 6010B	mg/kg	20,000	14.2	10.4	8.3	8.6	6.7
Copper	EPA 6010B	mg/kg	41,000	14.8	9.9	15.6	23.1	15.7
Gallium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20
Germanium	EPA 6010B	mg/kg	NA	<20	<20	<20	<20	<20
Iron	EPA 6010B	mg/kg	31,000	30,200	19,600	15,500	19,200	11,900
Lead	EPA 6010B	mg/kg	750	5.9	<5	<5	<5	<5
Manganese	EPA 6010B	mg/kg	19,000	410	603	448	339	375
Mercury	EPA 7471A	mg/kg	310	<0.15	<0.15	<0.15	<0.15	<0.15
Nickel	EPA 6010B	mg/kg	20,000	52.0	48.6	34.3	33.0	23.9
Selenium	EPA 6010B	mg/kg	5,100	<10	<10	<10	<10	<10
Silver	EPA 7761	mg/kg	5,100	<1	<1	<1	<1	<1
Sodium	EPA 6010B	mg/kg	NA	883[2]	772[2]	598[2]	495[2]	452[2]
Tungsten	EPA 6010B	mg/kg	NA	<10	<10	<10	<10	<10
Zinc	EPA 6010B	mg/kg	100,000	53.7	41.0	39.8	45.2	26.3

Concentrations expressed as milligrams per kilogram (mg/kg)

NA - Not applicable

[1] Analyte not detected. Spike or surrogate recovery below limits.

[2] Estimated value. Result may be biased low. Spike or surrogate recovery below limits.

Table 2. Selected Soil Organic Analytical Results
HECLA Pond 2

Parameter	Method	Units	Action Level	Sample Location and Depth				
				SW-1 (30')	SW-2 (15')	SW-2 (20')	SW-3 (15')	SW-3 (25')
Naphthalene	EPA 8260B	mg/kg	NA	0.016	<0.005	0.008	<0.005	<0.005
Acetone	EPA 8260B	mg/kg	54,000[1]	<0.125	0.196	0.230	0.487	0.311
TPH Gas	EPA 8015B	mg/kg	100[2]	0.057	<0.05	<0.05	0.058	<0.05

Concentrations expressed as milligrams per kilogram (mg/kg)

TPH - Total Petroleum Hydrocarbons

NA - Not applicable

[1]MCL - United States Environmental Protection Agency Region 9 Maximum Contaminant Level (Industrial)

[2]Nevada state action level for total TPH

APPENDIX A

Boring Logs

DATE DRILLED 10/03/06 BORING NO. SW-1

GROUND ELEVATION _____ SHEET 1 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
									3-foot riser with protective casing and lock.
0							SM		ALLUVIUM: Light brown, dry, medium dense, silty SAND with gravel.
5		24/6" 26/6" 50/4"					GM		Light brown, dry, medium dense, silty GRAVEL with sand.
							ML		Red, dry, loose, gravelly SILT with sand.
10		12/6" 13/6" 19/6"					SM		Light brown, dry, loose, silty SAND with gravel.
							CL-ML		Dark red, moist, dense, silty CLAY mottled with green.
15		10/6" 8/6" 24/6"							

Ninyo & Moore

MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-1

DATE DRILLED 10/03/06 BORING NO. SW-1

GROUND ELEVATION _____ SHEET 2 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
									Grayish brown, moist, silty CLAY.
20		11/6" 19/6" 21/6"					CL-ML		ALLUVIUM (continued): Light grayish brown, moist, medium dense, silty CLAY with gravel.
25		11/6" 13/6" 14/6"							Light grayish brown, moist, medium dense, silty CLAY.
		9/6" 20/6" 25/6"							SILTSTONE/BEDROCK: Dark reddish brown, dry, weakly cemented, SILTSTONE. Mottled with reddish brown to green layers.
30									Total depth = 31.0 feet. Groundwater not encountered during drilling. Monitoring well installed on 10/03/06.
35									

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MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-2

DATE DRILLED 10/03/06 BORING NO. SW-2

GROUND ELEVATION _____ SHEET 1 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
									3-foot riser with protective casing and lock.
0							ML		ALLUVIUM: Dark red, moist, loose, gravelly SILT with sand.
5		9/6" 9/6" 10/6"							Dark red, moist, loose, SILT.
10		9/6" 9/6" 9/6"					CL-ML		Red, moist, dense, silty CLAY. Red, moist, medium dense, silty CLAY with gravel.
15		30/6" 40/6" 45/6"							Dark red, dense, silty CLAY.

Ninyo & Moore

MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-3

DATE DRILLED 10/03/06 BORING NO. SW-2

GROUND ELEVATION _____ SHEET 2 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
20							CL-ML		ALLUVIUM (continued): Dark red, moist, dense, silty CLAY.
25									Red, moist, dense, silty CLAY. Light brown, moist, dense, silty CLAY.
30		30/6" 50/2"							SILTSTONE/BEDROCK: Light brown, dry, weakly cemented, SILTSTONE.
35									Total depth = 33.0 feet. Groundwater not encountered during drilling. Monitoring well installed on 10/03/06.

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MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-4

DATE DRILLED 10/03/06 BORING NO. SW-3

GROUND ELEVATION _____ SHEET 1 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
									3-foot riser with protective casing and lock.
0							ML		ALLUVIUM: Dark red, moist, loose, gravelly SILT with sand.
5		21/5"							Dark red, moist, loose SILT.
							CL-ML		Red, moist, dense, silty CLAY.
10		24/5"							Red, moist, dense, silty CLAY with gravel.
15		20/6" 34/6" 30/6"							Dark red, moist, dense, silty CLAY.

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MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-5

DATE DRILLED 10/03/06 BORING NO. SW-3

GROUND ELEVATION _____ SHEET 2 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
20		■						CL-ML		ALLUVIUM (continued): Dark red, moist, dense, silty CLAY.
25		■	16/6" 50/6"							SILSTONE/BEDROCK: Light gray, dry, weakly cemented, SILTSTONE.
30		■	14/6" 20/6" 21/6"							Total depth = 31.0 feet. Groundwater not encountered during drilling. Monitoring well installed on 10/03/06.
35										

Ninyo & Moore

MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-6

DATE DRILLED 10/04/06 BORING NO. SW-4

GROUND ELEVATION _____ SHEET 1 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
									3-foot riser with protective casing and lock.
0							SM		ALLUVIUM: Reddish brown, dry, loose, silty SAND with gravel.
5		14/6" 20/6" 22/6"							
10		14/6" 28/6" 24/6"					ML		Dark red, dry, dense, weakly cemented, SILT with clay.
15		24/6" 22/6" 24/6"					CL-ML		Dark red, dry, dense, silty CLAY with gravel.

Ninyo & Moore

MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-7

DATE DRILLED 10/04/06 BORING NO. SW-4

GROUND ELEVATION _____ SHEET 2 OF 2

METHOD OF DRILLING WDC hollow-stem auger drill rig

DRIVE WEIGHT 140 lbs. DROP 30"

SAMPLED BY RCJ LOGGED BY RCJ REVIEWED BY GB

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	WELL CONSTRUCTION	DESCRIPTION/INTERPRETATION
20									
							CL-ML		ALLUVIUM (continued): Grayish brown, dry, medium dense, silty CLAY with gravel.
25		10/6" 12/6" 10/6"							Grayish brown, medium dense, dry, silty CLAY.
									SILTSTONE/BEDROCK: Grayish brown, dry, weakly cemented SILTSTONE. Mottled with grayish brown to grayish green layers.
30		10/6" 20/6" 21/6"							
									Total depth = 32.0 feet. Groundwater not encountered during drilling. Monitoring well installed on 10/04/06.
35									

Ninyo & Moore

MONITORING WELL LOG

BIA/HECLA AND OMG APEX SITE
ST. GEORGE, UTAH

PROJECT NO.	DATE	FIGURE
301646001	12/06	A-8

KEY TO SYMBOLS

Symbol Description

Strata symbols

silty sand (Qaf, Qal)

Silty gravel

Silt

Uncertain - silty low plasticity clay

Siltstone

Soil Samplers

California sampler

No recovery with modified Split-Barrel Drive Sampler

Monitor Well Details

riser with cover and protective casing

surface seal

bentonite pellets

filter pack

slotted casing

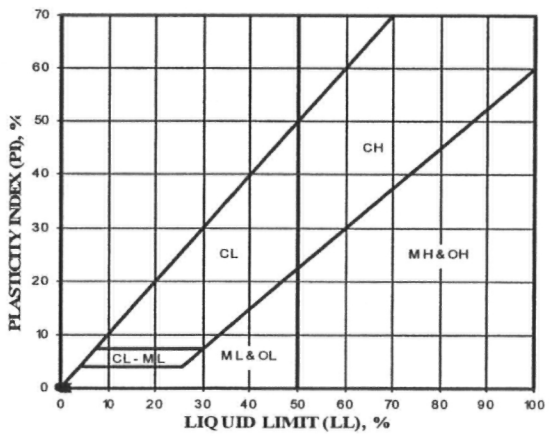
U.S.C.S. METHOD OF SOIL CLASSIFICATION

MAJOR DIVISIONS		SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS (More than 1/2 of soil >No. 200 sieve size)	GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)	GW	Well graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS (More than 1/2 of coarse fraction <No. 4 sieve size)	SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (More than 1/2 of soil <No. 200 sieve size)	SILTS & CLAYS Liquid Limit <50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS Liquid Limit >50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

GRAIN SIZE CHART

CLASSIFICATION	RANGE OF GRAIN SIZE	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	305 to 76.2
GRAVEL	3" to No. 4	76.2 to 4.76
Coarse	3" to 3/4"	76.2 to 19.1
Fine	3/4" to No. 4	19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.075
Coarse	No. 4 to No. 10	4.76 to 2.00
Medium	No. 10 to No. 40	2.00 to 0.420
Fine	No. 40 to No. 200	0.420 to 0.075
SILT & CLAY	Below No. 200	Below 0.075

PLASTICITY CHART



Ninyo & Moore

U.S.C.S. METHOD OF SOIL CLASSIFICATION

APPENDIX B

Laboratory Report
Chain-of-Custody Form

ENVIROPRO LABORATORIES

Environmental Analysis
2712 South 3600 West, Suite E
West Valley City, UT 84119
Phone: (801) 964-2511 • Fax: (801) 964-2721
www.enviroprolabs.com

Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:15
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283001	SW-1 (5')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	63.0	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	145,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	ND	10-17-06
Copper	6010B	5	8.8	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	3,230	10-17-06
Lead	6010B	5	5.6	10-17-06
Manganese	6010B	1	108	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	14.1	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	181	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	24.6	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:30
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283002	SW-1 (10')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	64.5	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	113,000	10-25-06
Chromium	6010B	5	7.9	10-17-06
Cobalt	6010B	5	7.1	10-17-06
Copper	6010B	5	7.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	12,960	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	185	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	52.0	10-17-06
Selenium	6010B	10	10.9	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	251	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	23.6	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:35
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283003	SW-1 (15')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	28.6	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	68,300	10-25-06
Chromium	6010B	5	9.9	10-17-06
Cobalt	6010B	5	9.4	10-17-06
Copper	6010B	5	17.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	15,700	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	314	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	41.3	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	358	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	33.9	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Date/Time Collected: 10-3-06/7:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283004	SW-1 (20')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	14.4	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	148,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	ND	10-17-06
Copper	6010B	5	13.8	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	6,150	10-17-06
Lead	6010B	5	9.3	10-17-06
Manganese	6010B	1	263	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	26.6	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	359	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	9.2	10-17-06

Flag Legend
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UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283005	SW-1 (25')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	21.9	10-17-06
Barium	6010B	1	48.7	10-19-06
Cadmium	6010B	2	10.7	10-17-06
Calcium	6010B	10	131,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	7.1	10-17-06
Copper	6010B	5	24.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	12,000	10-17-06
Lead	6010B	5	27.5	10-17-06
Manganese	6010B	1	392	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	34.0	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	539	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	620	10-17-06

Flag Legend
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283005	SW-1 (25')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283005	SW-1 (25')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

ENVIROPRO LABORATORIES

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283005	SW-1 (25')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	ND	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283005	SW-1 (25')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/7:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283005	SW-1 (25')	10-10-06/10-16-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283005	SW-1 (25')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Date/Time Collected: 10-3-06/8:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283006	SW-1 (30')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	358	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	113,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	5.4	10-17-06
Copper	6010B	5	17.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	9,920	10-17-06
Lead	6010B	5	38.7	10-17-06
Manganese	6010B	1	315	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	35.4	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	576	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	31.8	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283006	SW-1 (30')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283006	SW-1 (30')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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West Valley City, UT 84119
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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283006	SW-1 (30')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	ND	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283006	SW-1 (30')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	0.016
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283006	SW-1 (30')	10-10-06/10-17-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283006	SW-1 (30')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	0.057	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283007	SW-2 (5')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	60.0	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	110,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	ND	10-17-06
Copper	6010B	5	ND	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	4,980	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	136	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	17.9	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	597	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	8.1	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283008	SW-2 (10')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	84.0	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	95,900	10-25-06
Chromium	6010B	5	5.6	10-17-06
Cobalt	6010B	5	6.0	10-17-06
Copper	6010B	5	8.8	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	8,590	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	255	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	36.0	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	1,250	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	19.7	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:55
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283009	SW-2 (15')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	98.9	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	60,500	10-25-06
Chromium	6010B	5	9.6	10-17-06
Cobalt	6010B	5	9.6	10-17-06
Copper	6010B	5	19.5	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	11,600	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	323	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	40.9	10-17-06
Selenium	6010B	10	12.9	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	2,340	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	48.7	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

The test results contained in this report comply with the requirements of the National Environmental Laboratory Accreditation Program (NELAP).

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Analytical Test Results

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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:55
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283009	SW-2 (15')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283009	SW-2 (15')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:55
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283009	SW-2 (15')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	0.196	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283009	SW-2 (15')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Analytical Test Results

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/8:55
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283009	SW-2 (15')	10-10-06/10-16-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283009	SW-2 (15')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/9:05
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283010	SW-2 (20')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	68.7	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	96,200	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	8.4	10-17-06
Copper	6010B	5	17.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	11,800	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	444	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	45.1	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	1,050	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	38.2	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/9:05
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283010	SW-2 (20')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

The test results contained in this report comply with the requirements of the National Environmental Laboratory Accreditation Program (NELAP).

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283010	SW-2 (20')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/9:05
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283010	SW-2 (20')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
Acetone	0.125	0.230
Benzene	0.025	ND
Bromobenzene	0.025	ND
Bromochloromethane	0.025	ND
Bromodichloromethane	0.025	ND
Bromoform	0.025	ND
Bromomethane	0.025	ND
2-Butanone(MEK)	0.05	ND
n-Butylbenzene	0.025	ND
sec-Butylbenzene	0.025	ND
tert-Butylbenzene	0.025	ND
Carbon Disulfide	0.025	ND
Carbon tetrachloride	0.025	ND
Chlorobenzene	0.025	ND
Chloroethane	0.025	ND
Chloroform	0.025	ND
Chloromethane	0.025	ND
2-Chlorotoluene	0.025	ND
4-Chlorotoluene	0.025	ND
Cyclohexanone	0.125	ND
Dibromochloromethane	0.025	ND
1,2-Dibromo-3-chloropropane	0.025	ND
1,2-Dibromoethane	0.025	ND
Dibromomethane	0.025	ND
1,2-Dichlorobenzene	0.025	ND
1,3-Dichlorobenzene	0.025	ND
1,4-Dichlorobenzene	0.025	ND
Dichlorodifluoromethane	0.025	ND
1,1-Dichloroethane	0.025	ND
1,2-Dichloroethane	0.025	ND
1,1-Dichloroethene	0.025	ND
cis-1,2-Dichloroethene	0.025	ND
trans-1,2-Dichloroethene	0.025	ND
1,2-Dichloropropane	0.025	ND

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283010	SW-2 (20')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	0.008
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Analytical Test Results

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/9:05
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283010	SW-2 (20')	10-10-06/10-17-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283010	SW-2 (20')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/9:30
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283011	SW-2 (30')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	24.1	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	169,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	ND	10-17-06
Copper	6010B	5	16.9	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	5,770	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	277	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	22.2	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	363	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	29.8	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283012	SW-3 (5')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	83.3	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	110,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	12.4	10-17-06
Copper	6010B	5	30.8	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	8,170	10-17-06
Lead	6010B	5	32.6	10-17-06
Manganese	6010B	1	249	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	38.6	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	290	10-17-06
Tungsten	6010B	10	24.6	10-25-06
Zinc	6010B	5	39.0	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:15
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283013	SW-3 (10')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	38.9	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	177,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	6.9	10-17-06
Copper	6010B	5	8.9	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	4,820	10-17-06
Lead	6010B	5	ND	10-17-06
Manganese	6010B	1	148	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	26.3	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	293	10-17-06
Tungsten	6010B	10	10.7	10-25-06
Zinc	6010B	5	12.7	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283014	SW-3 (15')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	47.7	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	157,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	ND	10-17-06
Copper	6010B	5	14.3	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	6,400	10-17-06
Lead	6010B	5	7.3	10-17-06
Manganese	6010B	1	232	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	29.8	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	767	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	12.3	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283014	SW-3 (15')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283014	SW-3 (15')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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Environmental Analysis
2712 South 3600 West, Suite E
West Valley City, UT 84119
Phone: (801) 964-2511 • Fax: (801) 964-2721
www.enviroprolabs.com

Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283014	SW-3 (15')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	0.487	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC:MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283014	SW-3 (15')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283014	SW-3 (15')	10-10-06/10-16-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283014	SW-3 (15')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	0.058	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283015	SW-3 (20')	10-17-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic	6010B	10	ND	10-17-06
Barium	6010B	1	46.6	10-19-06
Cadmium	6010B	2	ND	10-17-06
Calcium	6010B	10	139,000	10-25-06
Chromium	6010B	5	ND	10-17-06
Cobalt	6010B	5	5.5	10-17-06
Copper	6010B	5	15.4	10-17-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	5,600	10-17-06
Lead	6010B	5	7.2	10-17-06
Manganese	6010B	1	179	10-17-06
Mercury	7471A	0.15	ND	10-15-06
Nickel	6010B	5	36.5	10-17-06
Selenium	6010B	10	ND	10-17-06
Silver [UJ]	7761	1	ND	10-19-06
Sodium [J]	6010B	10	539	10-17-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	16.7	10-17-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283016	SW-3 (25')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	38.8	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	166,000	10-25-06
Chromium	6010B	5	ND	10-19-06
Cobalt	6010B	5	ND	10-19-06
Copper	6010B	5	9.9	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	7,680	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	361	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	17.4	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	482	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	24.2	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283016	SW-3 (25')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283016	SW-3 (25')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283016	SW-3 (25')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	0.311	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283016	SW-3 (25')	10-11-06/10-11-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/12:50
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283016	SW-3 (25')	10-10-06/10-17-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283016	SW-3 (25')	10-11-06/10-11-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F

Flag Legend
F- No Dual column confirmation.
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
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Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-3-06/13:05
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283017	SW-3 (30')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	46.9	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	133,000	10-25-06
Chromium	6010B	5	10.4	10-19-06
Cobalt	6010B	5	9.4	10-19-06
Copper	6010B	5	45.0	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	17,100	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	286	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	29.6	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	912	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	37.9	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

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Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/7:15
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283018	SW-4 (5')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic UJ	6010B	10	ND	10-19-06
Barium	6010B	1	115	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	160,000	10-25-06
Chromium	6010B	5	ND	10-19-06
Cobalt	6010B	5	6.0	10-19-06
Copper	6010B	5	9.6	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	10,000	10-19-06
Lead	6010B	5	5.7	10-19-06
Manganese	6010B	1	254	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	23.8	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium J	6010B	10	231	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	27.1	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

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Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/7:30
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283019	SW-4 (10')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	119	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	60,600	10-25-06
Chromium	6010B	5	23.1	10-19-06
Cobalt	6010B	5	14.2	10-19-06
Copper	6010B	5	14.8	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	30,200	10-19-06
Lead	6010B	5	5.9	10-19-06
Manganese	6010B	1	410	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	52.0	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	883	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	53.7	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

ENVIROPRO LABORATORIES

Environmental Analysis
2712 South 3600 West, Suite E
West Valley City, UT 84119
Phone: (801) 964-2511 • Fax: (801) 964-2721
www.enviroprolabs.com

Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/7:45
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283020	SW-4 (15')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	83.3	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	113,000	10-25-06
Chromium	6010B	5	11.9	10-19-06
Cobalt	6010B	5	10.4	10-19-06
Copper	6010B	5	9.9	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	19,600	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	603	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	48.6	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	772	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	41.0	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:15
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283021	SW-4 (20')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	62.4	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	132,000	10-25-06
Chromium	6010B	5	6.9	10-19-06
Cobalt	6010B	5	8.3	10-19-06
Copper	6010B	5	15.6	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	15,500	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	448	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	34.3	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	598	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	39.8	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283022	SW-4 (25')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	467	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	112,000	10-25-06
Chromium	6010B	5	10.4	10-19-06
Cobalt	6010B	5	8.6	10-19-06
Copper	6010B	5	23.1	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	19,200	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	339	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	33.0	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	495	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	45.2	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283022	SW-4 (25')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283022	SW-4 (25')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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West Valley City, UT 84119
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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A Dilution: 5	SW846 8260B	H

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283022	SW-4 (25')	10-23-06/10-23-06

Analyte	MRL (mg/kg)	Results (mg/kg)
Acetone	0.125	ND
Benzene	0.025	ND
Bromobenzene	0.025	ND
Bromochloromethane	0.025	ND
Bromodichloromethane	0.025	ND
Bromoform	0.025	ND
Bromomethane	0.025	ND
2-Butanone(MEK)	0.05	ND
n-Butylbenzene	0.025	ND
sec-Butylbenzene	0.025	ND
tert-Butylbenzene	0.025	ND
Carbon Disulfide	0.025	ND
Carbon tetrachloride	0.025	ND
Chlorobenzene	0.025	ND
Chloroethane	0.025	ND
Chloroform	0.025	ND
Chloromethane	0.025	ND
2-Chlorotoluene	0.025	ND
4-Chlorotoluene	0.025	ND
Cyclohexanone	0.125	ND
Dibromochloromethane	0.025	ND
1,2-Dibromo-3-chloropropane	0.025	ND
1,2-Dibromoethane	0.025	ND
Dibromomethane	0.025	ND
1,2-Dichlorobenzene	0.025	ND
1,3-Dichlorobenzene	0.025	ND
1,4-Dichlorobenzene	0.025	ND
Dichlorodifluoromethane	0.025	ND
1,1-Dichloroethane	0.025	ND
1,2-Dichloroethane	0.025	ND
1,1-Dichloroethene	0.025	ND
cis-1,2-Dichloroethene	0.025	ND
trans-1,2-Dichloroethene	0.025	ND
1,2-Dichloropropane	0.025	ND

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Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	H
	Dilution: 5		

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283022	SW-4 (25')	10-23-06/10-23-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

Flag Legend
H- Sample holding time exceeded for this test

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:25
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283022	SW-4 (25')	10-10-06/10-16-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283022	SW-4 (25')	10-23-06/10-23-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F, H

Flag Legend
F- No Dual column confirmation.
H- Sample holding time exceeded for this test
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Total Metals	SW846 3050A Dilution: 100	SW846 6010B	

Lab Sample ID	Customer Sample ID	Date Prep.
283023	SW-4 (30')	10-19-06

Metals	Method	MRL (mg/kg)	Results (mg/kg)	Date Anal.
Arsenic [UJ]	6010B	10	ND	10-19-06
Barium	6010B	1	62.9	10-19-06
Cadmium	6010B	2	ND	10-19-06
Calcium	6010B	10	135,000	10-25-06
Chromium	6010B	5	ND	10-19-06
Cobalt	6010B	5	6.7	10-19-06
Copper	6010B	5	15.7	10-19-06
Gallium	6010B	20	ND	10-25-06
Germanium	6010B	20	ND	10-25-06
Iron	6010B	5	11,900	10-19-06
Lead	6010B	5	ND	10-19-06
Manganese	6010B	1	375	10-19-06
Mercury	7471A	0.15	ND	10-18-06
Nickel	6010B	5	23.9	10-19-06
Selenium	6010B	10	ND	10-19-06
Silver	7761	1	ND	10-19-06
Sodium [J]	6010B	10	452	10-19-06
Tungsten	6010B	10	ND	10-25-06
Zinc	6010B	5	26.3	10-19-06

Flag Legend
J- Estimated value. Result may be biased low. Spike or surrogate recovery below limits.
UJ- Analyte not detected. Spike or surrogate recovery below limits.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283023	SW-4 (30')	10-17-06/10-20-06

Analyte	MRL (µg/kg)	Results (µg/kg)
Pyridine	190	ND
Phenol	190	ND
Bis(2-chloroethyl)ether	190	ND
2-Chlorophenol	190	ND
1,3-Dichlorobenzene	190	ND
1,4-Dichlorobenzene	190	ND
Benzyl alcohol	190	ND
1,2-Dichlorobenzene	190	ND
2-Methylphenol	190	ND
Bis(2-chloroisopropyl)ether	190	ND
4-Methylphenol	190	ND
N-Nitrosodi-n-propylamine	190	ND
Hexachloroethane	190	ND
Nitrobenzene	190	ND
Isophorone	190	ND
2-Nitrophenol	190	ND
2,4-Dimethylphenol	190	ND
Benzoic acid	760	ND
Bis(2-chloroethoxy)methane	190	ND
2,4-Dichlorophenol	190	ND
1,2,4-Trichlorobenzene	190	ND
Naphthalene	190	ND
4-Chloroaniline	190	ND
Hexachlorobutadiene	190	ND
4-Chloro-3-methylphenol	190	ND
2-Methylnaphthalene	190	ND
Hexachlorocyclopentadiene	190	ND
2,4,6-Trichlorophenol	190	ND
2,4,5-Trichlorophenol	190	ND
2-Chloronaphthalene	190	ND
2-Nitroaniline	190	ND
Dimethyl phthalate	190	ND
2,6-Dinitrotoluene	190	ND
Acenaphthylene	190	ND
3-Nitroaniline	190	ND
Acenaphthene	190	ND
2,4-Dinitrophenol	760	ND

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Analysis	Prep. Method	Analysis Method	Flags
Semi-volatiles GC/MS	SW846 3550B	SW846 8270C	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283023	SW-4 (30')	10-17-06/10-20-06	

Analyte	MRL (µg/kg)	Results (µg/kg)
4-Nitrophenol	760	ND
Dibenzofuran	190	ND
2,4-Dinitrotoluene	190	ND
Diethyl phthalate	190	ND
4-Chlorophenyl phenyl ether	190	ND
Fluorene	190	ND
4-Nitroaniline	190	ND
4,6-Dinitro-2-methylphenol	760	ND
N-Nitrosodiphenylamine	190	ND
4-Bromophenyl Phenyl Ether	190	ND
Hexachlorobenzene	190	ND
Pentachlorophenol	760	ND
Phenanthrene	190	ND
Anthracene	190	ND
Carbazole	190	ND
Di-n-butyl phthalate	190	ND
Fluoranthene	190	ND
Pyrene	190	ND
Butyl benzyl phthalate	190	ND
3,3'-Dichlorobenzidine	190	ND
Benz(a)anthracene	190	ND
Chrysene	190	ND
Bis(2-ethylhexyl)phthalate	190	ND
Di-n-octyl phthalate	190	ND
Benzo(b)fluoranthene	190	ND
Benzo(k)fluoranthene	190	ND
Benzo(a)pyrene	190	ND
Indeno(1,2,3-cd)pyrene	190	ND
Dibenz(a,h)anthracene	190	ND
Benzo(g,h,i)perylene	190	ND

Semi-volatiles analysis subcontracted to:
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, UT 84123
(801) 266-7700

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A	SW846 8260B	
	Dilution: 5		
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283023	SW-4 (30')	10-19-06/10-19-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	
Acetone	0.125	ND	
Benzene	0.025	ND	
Bromobenzene	0.025	ND	
Bromochloromethane	0.025	ND	
Bromodichloromethane	0.025	ND	
Bromoform	0.025	ND	
Bromomethane	0.025	ND	
2-Butanone(MEK)	0.05	ND	
n-Butylbenzene	0.025	ND	
sec-Butylbenzene	0.025	ND	
tert-Butylbenzene	0.025	ND	
Carbon Disulfide	0.025	ND	
Carbon tetrachloride	0.025	ND	
Chlorobenzene	0.025	ND	
Chloroethane	0.025	ND	
Chloroform	0.025	ND	
Chloromethane	0.025	ND	
2-Chlorotoluene	0.025	ND	
4-Chlorotoluene	0.025	ND	
Cyclohexanone	0.125	ND	
Dibromochloromethane	0.025	ND	
1,2-Dibromo-3-chloropropane	0.025	ND	
1,2-Dibromoethane	0.025	ND	
Dibromomethane	0.025	ND	
1,2-Dichlorobenzene	0.025	ND	
1,3-Dichlorobenzene	0.025	ND	
1,4-Dichlorobenzene	0.025	ND	
Dichlorodifluoromethane	0.025	ND	
1,1-Dichloroethane	0.025	ND	
1,2-Dichloroethane	0.025	ND	
1,1-Dichloroethene	0.025	ND	
cis-1,2-Dichloroethene	0.025	ND	
trans-1,2-Dichloroethene	0.025	ND	
1,2-Dichloropropane	0.025	ND	

The test results contained in this report comply with the requirements of the National Environmental Laboratory Accreditation Program (NELAP).

ENVIROPRO LABORATORIES

Environmental Analysis
2712 South 3600 West, Suite E
West Valley City, UT 84119
Phone: (801) 964-2511 • Fax: (801) 964-2721
www.enviroprolabs.com

Analysis	Prep. Method	Analysis Method	Flags
Volatiles GC.MS	SW846 5030A Dilution: 5	SW846 8260B	

Lab Sample ID	Customer Sample ID	Date Prep./Anal.
283023	SW-4 (30')	10-19-06/10-19-06

Analyte	MRL (mg/kg)	Results (mg/kg)
1,3-Dichloropropane	0.025	ND
2,2-Dichloropropane	0.025	ND
1,1-Dichloropropene	0.025	ND
Ethyl Acetate	0.1	ND
Ethyl Ether	0.05	ND
Ethylbenzene	0.025	ND
Hexachlorobutadiene	0.025	ND
Isopropylbenzene	0.025	ND
p-Isopropyltoluene	0.025	ND
Methylene chloride	0.05	ND
4-Methyl 2-pentanone (MIBK)	0.1	ND
MTBE	0.025	ND
Naphthalene	0.005	ND
2-Nitropropane	0.025	ND
n-Propylbenzene	0.025	ND
Styrene	0.025	ND
1,1,1,2-Tetarchloroethane	0.025	ND
1,1,2,2-Tetrachloroethane	0.025	ND
Tetrachloroethene	0.025	ND
Toluene	0.025	ND
1,2,3-Trichlorobenzene	0.025	ND
1,2,4-Trichlorobenzene	0.025	ND
1,1,1-Trichloroethane	0.025	ND
1,1,2-Trichloroethane	0.025	ND
Trichloroethylene	0.025	ND
Trichlorofluoromethane	0.025	ND
1,2,3-Trichloropropane	0.025	ND
1,1,2-Trichlorotrifluoroethane	0.025	ND
1,2,4-Trimethylbenzene	0.025	ND
1,3,5-Trimethylbenzene	0.025	ND
Vinyl chloride	0.025	ND
o-Xylene	0.025	ND
m,p-Xylenes	0.025	ND

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/8:40
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method	
TPH Diesel	SW846 3550A Dilution: .05	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283023	SW-4 (30')	10-10-06/10-16-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Diesel 2	10	ND	F, X

Analysis	Prep. Method	Analysis Method	
TPH Gas	SW846 5030A Dilution: 1	SW846 8015B	
Lab Sample ID	**Customer Sample ID**	**Date Prep./Anal.**	
283023	SW-4 (30')	10-23-06/10-23-06	
Analyte	**MRL (mg/kg)**	**Results (mg/kg)**	**Flags**
Gasoline	0.05	ND	F, H

Flag Legend
F- No Dual column confirmation.
H- Sample holding time exceeded for this test
X- Hexane used for extractions.

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Analytical Test Results

Client: Ninyo & Moore
Address: 6700 Paradise Road, Suite E
Las Vegas, NV 89119
Date/Time Received: 10-10-06/8:40
Date/Time Collected: 10-4-06/14:00
Project: Hecla mining Company

Contact: Greg Beck

Received By: Roy Breslawski
Matrix: Soil
Location: St. George, Utah

Analysis	Prep. Method	Analysis Method		
TCLP Metals	SW846 1311/3010A/3020A Dilution: 1	SW846 6010B	Flags	
Lab Sample ID	**Customer Sample ID**	**Date Prep.**		
283024	Composite	10-11-06		
Metals	**Method**	**MRL (mg/l)**	**Results (mg/l)**	**Date Anal.**
Arsenic	6010B	0.2	ND	10-12-06
Barium	6010B	0.01	0.67	10-12-06
Cadmium	6010B	0.02	ND	10-12-06
Chromium	6010B	0.05	ND	10-12-06
Lead	6010B	0.05	ND	10-12-06
Mercury	7471A	0.05	ND	10-13-06
Selenium	7740	0.01	ND	10-16-06
Silver	7761	0.05	ND	10-16-06

Signature _____ Date: October 13, 2006

Roy Breslawski, Laboratory Manager

Phone: 801-964-2511
Fax: 801-964-2721
www.enviroprolabs.com

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2712 South 3600 West, Suite E
West Valley City, UT 84119

Chain of Custody Record

Date: 10/9/06 Page: 1 of 3

Ryan C. Jones (702) 433-0330 (702) 433-0707
Contact Name Phone Number Fax Number

Ninyo & Moore
Company Name

6700 Paradise Rd., Ste. E
Street Address

Las Vegas, NV
City, State, Zip

Hecla Mining Company St. George, Utah
Project Name Site Location

Sample ID	Date Collected	Time	Matrix	Lab ID	Preservation Code	Number of Containers	Rush	Container Size	Analysis Request: RCRA-8 Metals w/ addition of cobalt, copper, gallium, germanium, manganese, nickel, sodium, vanadium, zinc and calcium using EPA Method 6010A, 6010AT, 6010BT, and 7471	Analysis Request: (SVOCs) EPA Method 8270	Analysis Request: (VOCs) EPA Method 8260B	Analysis Request: TPH including (gasoline, diesel, motor oil, benzene, toluene, ethylbenzene, and xylenes (EPA Method 8015M)	Analysis Request: TCLP Metals	Preservation Code / Comments
SW-1 (5')	10/3/06	0715	Soil	283001	1	2		4oz	✓					
SW-1 (10')		0730		283002					✓					
SW-1 (15')		0735		283003					✓					
SW-1 (20')		0740		283004					✓					
SW-1 (25')		0750		283005					✓					
SW-1 (30')		0800		283006					✓	✓	✓	✓		
SW-2 (5')		0840		283007					✓	✓	✓	✓		
SW-2 (10')		0850		283008					✓					
SW-2 (15')		0855		283009					✓					
SW-2 (20')	↓	0905	↓	283010	↓	↓		↓	✓	✓	✓	✓		

Special Instructions / Comments

FedEx 8080 4256 4870

Route Results Through:
Circle: Fax (Email)

Email address: rjones@ninyoandmoore.com
gbeck@ninyoandmoore.com

	(1) Relinquished By	(2) Relinquished By	Sampler Initials:
	Ryan C. Jones		
	(1) Date / Time: 10/9/06 / 1700	(2) Date / Time	Method of Shipment: HAND CARRY USPS FEDX UPS
	(1) Company: Ninyo & Moore	(2) Company	
	(1) Received By	(2) Received By	CoC Seal Intact? Yes No
	(1) Date / Time: 10-10-06 8:40	(2) Date / Time	
	(1) Company: Enviropro	(2) Company	

Phone: 801-964-2511
Fax: 801-964-2721
www.enviroprolabs.com

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West Valley City, UT 84119

Chain of Custody Record

Date: 10/9/06 Page: 2 of 3

Contact Name: Ryan C. Jones | Phone Number: (702) 433-0330 | Fax Number: (702) 433-0707

Company Name: Ninyo + Moore

Street Address: 6700 Paradise Rd., Ste. E

City, State, Zip: Las Vegas, NV

Project Name: Hecla Mining Company | Site Location: St. George, Utah

Analysis Request:
- (A) *RCRA-8 Metals w/ additional [illegible] cobalt, copper, gallium, germanium, [illegible] manganese, nickel, sodium, tungsten, [illegible] zinc and selenium using EPA Method 6010A, 6010AT, 6010BT, and 7471
- (B) (SVOCs) EPA Method 8270
- (C) (VOCs) EPA Method 8260E
- (D) TPH including (gasoline, diesel, motor oil), benzene, toluene, ethylbenzene, and total xylenes (EPA Method 8015M)
- (E) TCLP Metals

Sample ID	Date Collected	Time	Matrix	Lab ID	Preservation Code	Number of Containers	Rush	Container Size	(A) Metals	(B) SVOCs	(C) VOCs	(D) TPH	(E) TCLP Metals	Comments
SW-2 (30')	10/3/06	0930	Soil	283011	1	2		4oz	✓					
SW-3 (5')	↓	1200	↓	283012	↓	↓		↓	✓					
SW-3 (10')	↓	1215	↓	283013	↓	↓		↓	✓					
SW-3 (15')	↓	1225	↓	283014	↓	↓		↓	✓					
SW-3 (20')	↓	1240	↓	283015	↓	↓		↓	✓	✓	✓	✓		
SW-3 (25')	↓	1250	↓	283016	↓	↓		↓	✓					
SW-3 (30')	↓	1305	↓	283017	↓	↓		↓	✓	✓	✓	✓		
SW-4 (5')	10/4/06	0715	↓	283018	↓	↓		↓	✓					
SW-4 (10')	↓	0730	↓	283019	↓	↓		↓	✓					
SW-4 (15')	↓	0745	↓	283020	↓	↓		↓	✓					

Preservation Code:
1 = 4°C
2 = HNO_3
3 = HCl
4 = H_2SO_4
5 = NaOH
6 = Other

Special Instructions / Comments:

(1)	(2)
Relinquished By: Ryan C. Jones	Relinquished By:
Date / Time: 10/9/06 / 1700	Date / Time:
Company: Ninyo + Moore	Company:
Received By: [signature]	Received By:
Date / Time: 10-10-06 8:40	Date / Time:
Company: Enviropro	Company:

Sampler Initials:

Method of Shipment: HAND CARRY / USPS / (FEDX) / UPS

CoC Seal Intact? (Yes) No

Route Results Through: Circle: (Fax) (Email)

Email address: rjones@ninyoandmoore.com

Phone: 801-964-2511
Fax: 801-964-2721
www.enviroprolabs.com

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2712 South 3600 West, Suite E
West Valley City, UT 84119

Chain of Custody Record

Date: 10/9/06 Page: 3 of 3

Ryan C. Jones (702) 433-0330 (702) 433-0707
Contact Name Phone Number Fax Number

Ninyo + Moore
Company Name

6700 Paradise Rd., Ste. F
Street Address

Las Vegas, NV
City, State, Zip

Hecla Mining Company St. George, Utah
Project Name Site Location

Sample ID	Date Collected	Time	Matrix	Lab ID	Preservation Code	Number of Containers	Rush	Container Size	#RCRA-8 Metals w/ cobalt, copper, gallium, germanium, iron, manganese, nickel, sodium, vanadium	Zinc and cadmium using EPA Method 6010A, 6010AT, 6010BT, or 7471.	(SVOCs) EPA Method 8270	(VOCs) EPA Method 8260B	TPH including (gasoline, diesel, motor oil), benzene, toluene, ethylbenzene, and total xylenes (EPA Method 8015M)	TCLP Metals	Comments
SW-4 (20')	10/4/06	0815	Soil	283021	1	2		4oz	✓		#5				
SW-4 (25')		0825		283022					✓						
SW-4 (30')		0840		283023					✓		✓	✓	✓		
Composite	↓	1400	↓	283024	↓	↓		↓	✓		✓	✓	✓		
														✓	

Preservation Code: 1 = 4°C; 2 = HNO_3; 3 = HCl; 4 = H_2SO_4; 5 = NaOH; 6 = Other

Special Instructions / Comments

Route Results Through: Circle: (Fax) (Email)

Email address: rjones@ninyoandmoore.com

	(1) Relinquished By	(2) Relinquished By	Sampler Initials:
	Ryan C. Jones RCJ.		
	(1) Date / Time 10/9/06 / 1700	(2) Date / Time	Method of Shipment
	(1) Company	(2) Company	HAND CARRY USPS (FEDX) UPS
	(1) Received By	(2) Received By	CoC
	(1) Date / Time 10-10-06 8:40	(2) Date / Time	Seal Intact?
	(1) Company Enviropro	(2) Company	(Yes) No